# College of Pharmacy

## Fall 2018 Elective Schedule

<table>
<thead>
<tr>
<th>Elective Code</th>
<th>Course Title</th>
<th>Facilitator</th>
<th>Eligibility</th>
<th>Term</th>
<th>Format</th>
<th>Course Start Date</th>
<th>Course End Date</th>
<th>Course Days/Times</th>
<th>Capacity</th>
<th>Credit Hours</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM ELC1</td>
<td>Introduction to Clinical Research</td>
<td>Dr. Patrick Chan</td>
<td>P1 &amp; P2</td>
<td>Fall</td>
<td>Combination of didactic and active learning</td>
<td>8/13/18</td>
<td>12/21/18</td>
<td>Thursdays, 3:00 – 5:00 p.m. (8 weeks)</td>
<td>40</td>
<td>1.00</td>
<td>Letter Grade</td>
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<tr>
<td>PHRM ELC3</td>
<td>Diabetes Advanced Elective – Online DM Educate</td>
<td>Dr. David Pham</td>
<td>P2 &amp; P3</td>
<td>Fall</td>
<td>Online modules, class meets first day and two other times for case based discussions</td>
<td>8/13/18</td>
<td>12/21/18</td>
<td>Thursdays, 3:00 – 5:00 p.m. (3 meetings)</td>
<td>25</td>
<td>2.00</td>
<td>Letter Grade</td>
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</tbody>
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Clinical research is defined as the study of a drug, biologic, or device in human subjects with the intent to discover potential beneficial effects and/or determine its safety and efficacy. This elective introduces students to clinical trials and basic clinical research principles for those interested in pursuing residency or a field of clinical research (fellowship, industry, FDA career). Throughout the elective course, we will discuss principles of clinical research, experimental design, managing and monitoring clinical trials, data management and analysis, and regulatory affairs with drugs, biologics, and devices.

This is a self-paced online series of videos and post-quizzes after the videos that expand your knowledge in diabetes care. There are multiple topics that each take varying amount of time, but overall accounts to about 2 hours/week (30hrs overall) which can be done whenever throughout the course. Class time will be to discuss questions or concerns from the video and to apply the video modules to a case.

This comprehensive diabetes series includes drug therapy, but also history of diabetes, exercise and nutrition, how to manage inpatient diabetes, gestational diabetes, children with diabetes, physiological issues, and motivation interviewing. The course was created by the University of Pittsburgh ([https://www.dmecourse.pharmacy.pitt.edu/](https://www.dmecourse.pharmacy.pitt.edu/)), but the modules were created by Certified Diabetes Educators (CDEs) from all over the country.
<table>
<thead>
<tr>
<th>PHRM ELC4</th>
<th>Independent Research</th>
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</thead>
<tbody>
<tr>
<td><strong>Facilitator:</strong></td>
<td>Individual Faculty Preceptors</td>
</tr>
<tr>
<td><strong>Eligibility:</strong></td>
<td>P1, P2 &amp; P3</td>
</tr>
<tr>
<td><strong>Term:</strong></td>
<td>Fall</td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Consent from faculty preceptor</td>
</tr>
<tr>
<td><strong>Format:</strong></td>
<td>Research</td>
</tr>
<tr>
<td><strong>Course Start Date:</strong></td>
<td>8/13/18</td>
</tr>
<tr>
<td><strong>Course End Date:</strong></td>
<td>12/21/18</td>
</tr>
<tr>
<td><strong>Course Days/Times:</strong></td>
<td>As scheduled with faculty preceptor</td>
</tr>
<tr>
<td><strong>Capacity:</strong></td>
<td>Unlimited</td>
</tr>
<tr>
<td><strong>Credit Hours:</strong></td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Grading:</strong></td>
<td>CR/NCR</td>
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This block introduces the student pharmacists to independent research experiences under the supervision of a faculty member. The research experience may vary from bench research (pharmaceutical sciences) to clinical translational research (pharmacy practice). Student pharmacists will be expected to participate in research activities at the rate of 3 hours per week per credit. 30 hours of research must be completed by the end of the semester to earn a grade for the elective course. Schedules for research will be determined by the student pharmacist in consultation with the faculty preceptor. Student pharmacists will only be allowed a maximum of two professional elective credits over two semesters (1 credit each). Any additional research elective course while eligible for course credit will not be counted towards the overall elective degree requirement.

Please note that not all faculty members may be able to offer the research elective course. Thus, the student pharmacist must email the faculty member directly to enquire about any openings for the desired semester (see faculty research and specialty profiles [http://www.westernu.edu/pharmacy/](http://www.westernu.edu/pharmacy/)).

<table>
<thead>
<tr>
<th>PHRM ELC5</th>
<th>Vaccines: Science and Society</th>
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<tbody>
<tr>
<td><strong>Facilitator:</strong></td>
<td>Dr. David Sanchez</td>
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<tr>
<td><strong>Eligibility:</strong></td>
<td>P2 &amp; P3</td>
</tr>
<tr>
<td><strong>Term:</strong></td>
<td>Fall</td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>PHRM 5111, PHRM 5401</td>
</tr>
<tr>
<td><strong>Format:</strong></td>
<td>Combination of Didactic and Active Learning</td>
</tr>
<tr>
<td><strong>Course Start Date:</strong></td>
<td>8/13/18</td>
</tr>
<tr>
<td><strong>Course End Date:</strong></td>
<td>12/21/18</td>
</tr>
<tr>
<td><strong>Course Days/Times:</strong></td>
<td>Fridays, 1:00 p.m. – 3:00 p.m.</td>
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<tr>
<td><strong>Capacity:</strong></td>
<td>25</td>
</tr>
<tr>
<td><strong>Credit Hours:</strong></td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Grading:</strong></td>
<td>CR/NCR</td>
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The overall goal for this course is to allow for students to further appreciate the scientific and clinical basis of vaccination as well as the key aspects of society opinion that have recently been challenging vaccine usage. Overview of important vaccines and the scientific basis behind the efficacy and safety of these vaccines are introduced along with aspects of individual vaccines that are often discussed in society about safety issues. The class will provide didactic instruction and reading blended with discussions on key topics.
PHRM ELC6A  Seminar in Professional Development
Facilitator:  Dr. Jason Wong
Eligibility:  P1, P2, & P3
Term:  Fall
Format:  Seminar by guest speakers, self-reflections
Course Start Date:  8/15/18
Course End Date:  12/5/18
Course Days/Times:  Wednesdays, 12:00 – 1:00 p.m.
Capacity:  140
Credit Hours:  1.00
Grading:  CR/NCR

This seminar elective provides presentations related to careers, leadership, management, legal and regulatory issues and other topics related to professional and personal development. This seminar course will give one unit of credit for attending a minimum number of these presentations and writing a minimum number of reflections. Open to year 1 PharmD students and year 2 PharmD students that have not taken the course previously. Course is offered in both fall and spring terms. See registration notification for capacity, course dates/times.

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PHRM ELC8  Lifestyle Management & Wellness
Facilitator:  Dr. Anne Kugler
Eligibility:  P2
Term:  Fall
Format:  Combination (Blended) – some coursework will be didactic, some active, and some will be online
Course Start Date:  8/23/18
Course End Date:  11/19/18
Course Days/Times:  Monday or Thursday, 3:00 p.m. – 5:00 p.m.
Capacity:  15
Credit Hours:  2.00
Grading:  Letter Grade

This course will serve to develop the abilities of student pharmacists to assist in designing a plan and guiding patients through lifestyle changes to prevent and improve common medical conditions, such as hyperlipidemia, diabetes, and hypertension. Student pharmacists will create detailed plans for specific patients, including recipes, exercise, motivational techniques, and other non-pharmacologic recommendations. They will also examine societal perspectives on nutrition and discuss initiatives to make improvements. Many class meetings and discussions will be done virtually, through use of Zoom. Over the duration of the course, student pharmacists will also focus on personal wellness, through design and completion of an individualized project aimed at improving their own health. This course will expand upon the basic nutrition information taught in PHRM 5224 and complement material in PHRM 6203.
**PHRM ELC11**  
**OTC and Self-Care for IPBP Students**

**Facilitator:** Dr. David Sanchez, Dr. David Wong  
**Eligibility:** P2 IPBP Students Only  
**Term:** Fall  
**Format:** Didactic/Online  
**Course Start Date:** 8/13/18  
**Course End Date:** 12/10/18  
**Course Days/Times:** Mondays, 3:00 – 4:00 p.m.  
**Capacity:** 20  
**Credit Hours:** 1.00  
**Grading:** CR/NCR

This course provides an extended review of OTC and Self-care to supplement instruction in the IPBP program. Through this elective, faculty will go over key concepts in OTC/Self-care that will better prepare student pharmacists in the IPBP program for their career as students and practicing pharmacists.

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**PHRM ELC12**  
**Immunotherapies**

**Facilitator:** Dr. David Sanchez  
**Eligibility:** P2 or P3  
**Term:** Fall  
**Format:** Didactic/Discussion  
**Course Start Date:** 8/17/18  
**Course End Date:** 12/21/18  
**Course Days/Times:** Fridays, 1:00 – 3:00 p.m.  
**Capacity:** 25  
**Credit Hours:** 1.00  
**Grading:** CR/NCR

This course provides an overview of commonly used immunotherapies and discussion of the disease states they can target. Discussions on the pros and cons of the immunotherapies are presented. Additional presentations from clinical and industry perspective are presented to give an overview of the role of pharmacists in working with these therapies.
PHRM ELC16  Introduction to the Pharmaceutical Industry
Facilitator:  Dr. Brandon Samson, Dr. Jim Scott
Eligibility:  P2 or P3
Term:  Fall
Format:  Classroom discussions and lecture, out of class assignments, student presentations
Course Start Date:  9/21/18
Course End Date:  11/16/18
Course Days/Times:  Fridays, 1:00 – 3:00 p.m.
Capacity:  12
Credit Hours:  1.00
Grading:  Letter Grade

This elective is designed to introduce student pharmacists to the pharmaceutical industry and its numerous functions with an emphasis on building entry-level competencies and experiences for student pharmacists pursuing employment or postgraduate training in the industry. Student pharmacists will be introduced to the more common roles and divisions of industry practice seen throughout many pharmaceutical companies and the pharmacists’ role in each, including but not limited to medical information, scientific communications/writing, regulatory affairs, medical affairs, and more. Through classroom sessions introducing each type of practice, student pharmacists will have a chance to build networking skills, identify roles of interest, and establish strong communications foundations required for many pharmacists in this type of practice. Student pharmacists will also have the chance to interact directly and through videoconferencing with guest faculty who are currently employed in the pharmaceutical industry and in the specialty for which they represent.

PHRM ELC17  Essential Oils: Ethnobotany, Pharmacology, and Application
Facilitator:  Dr. Benjamin Malcolm
Eligibility:  P2 or P3
Term:  Fall
Format:  In-person/online hybrid course; didactic, active, and team-based project learning
Course Start Date:  8/31/18
Course End Date:  12/13/18
Course Days/Times:  Thursdays 3:00-5:00
Capacity:  16
Credit Hours:  1.00
Grading:  Letter Grade

Essential oils are concentrated and lipophilic extracts of volatile aromatic molecules from botanical sources. Interest in scientific study of essential oils has expanded in recent years in parallel with their increased use as Complementary and Alternative Medicines (CAM) by the public. This elective introduces folkloric and ethnobotanical perspectives of essential oils, pharmacologic properties of essential oils, recent advances in scientific knowledge, and the evidence base for contemporary use. The course will feature a combination of lecture, projects, presentations, and experiential study delivered in a hybridized online/in person format.
PHRM ELC20  Stress Management for Student Pharmacists: MMY Method  
(Mindfulness, Meditation, and Yoga)

Facilitator: Dr. Anandi V. Law

**Eligibility:** P2 or P3

Term: Fall

Format: Combination of in-class and homework

Course Start Date: 8/24/18

Course End Date: 9/2/18

Course Days/Times: Fridays, 1:00 p.m. – 3:00 p.m.

Capacity: 15

Credit Hours: 1.00

Grading: CR/NCR

This elective is designed as an introductory to intermediate level course for the student pharmacist to learn basic techniques of Yogic breathing (Pranayama), postures (asanas), mindfulness, and meditation towards relaxation and stress reduction. The benefits of the course are intended to be both short and long term, dependent on individual levels of practice.

PHRM ELC22  The Pharmacist & Patient Centered Diabetes Care Certificate Training Program (APhA)

Facilitator: Dr. Josephine Aranda, Dr. Hyma Gogineni

**Eligibility:** P2 or P3

Term: Fall

Format: Self-Study Component - Pre-requisite before attending the live session

Self-Study Assessment (two opportunities to pass with a score of 70% or higher)

Pre-seminar patient cases

Live seminar component – required to attend full 8-hours

Post-seminar component – post-test, complete evaluations & claim credit

Combination of didactic and active learning

Course Start Date: 9/8/18

Course End Date: 9/8/18

Course Days/Times: Saturday, 8:00 – 5:00 p.m.

Capacity: 60

Credit Hours: 2.00

Grading: Letter Grade

Additional Cost: $130.00 for APhA Certificate

The Pharmacist and Patient-Centered Diabetes Care is an APhA Certificate Training Program that many employers are requiring this certification program in both community and ambulatory care settings to advance the profession of pharmacy. This is an intensive training program designed for student pharmacists to equip with the knowledge, skills, and confidence needed to provide effective, evidence-based diabetes care. Five self-study modules provide comprehensive instruction in current diabetes concepts and standards of care. The live seminar incorporates case studies and hands-on skills focused on the situations most likely to be encountered in community and ambulatory care practice settings. Students will refine their skills on evaluating and adjusting drug therapy regimens for patients with type 1 and type 2 diabetes, counseling patients about lifestyle interventions, analyzing and interpreting self-monitoring of blood glucose results, and assessing the overall health status of patients to identify needed monitoring and interventions.